JS 6/2/21
RJA 2/18/22

Chemistry Report for Case # P-19-0009

General

Submitter: Allnex USA Inc.

Contact: Daniel Liebowitz **Contact Telephone No.:** [redacted]

TS No.: [redacted]

Chemist: Masten, Bethany **Contractor Support:** Y

PV Init (kg/yr): [redacted] **PV Max (kg/yr):** [redacted]

Binding Option: ☐ **Exposure-Based Review:** ☑

Manufacture: ☐ **Import:** ☑

CAS Number: [redacted]

Chemical Name [redacted]

Trade Name: RESYDROLÂ® SWE 5862/37 liquid coating resins

IES Order: None

Generic Name: Carbonmonocycles,
polymer with haloalkyl substituted heteromonocycle and
hydro-hydroxypoly[oxy(alkyl-alkanediyl)],
dialkyl-alkanediamine-terminated, hydroxyalkylated, acetates
(salts)

Chemical Structure

[redacted]

Physical Chemical Properties

Molecular Formula: [redacted]	**Molecular Weight:**3129.0
% < 500:1.2	**% < 1000:**5.7
MP:	**MP Estimate:**
BP:	**BP Pressure:**
BP Estimate:	
VP (Torr):	**VP Estimate (Torr):**<0.000001
Water Solubility (g/L):	**Water Soluble Estimate (g/L):**Dispersible
Log P:	**Log P Estimate:**
Physical State — Neat: [redacted]	**Physical State — Manuf:**NK: Import

Physical State — Processing: [redacted]

Physical State — End Use: [redacted]

Additional Chemical Info

NAVG
MW = 3129 with 1.2% < 500 and 5.7% < 1000 by GPC.
Submitted
Properties: WS = Soluble; Density = 1.05 g/cc.
Estimated Properties: VP
< 0.000001 torr (Polymer salt); WS = Dispersible (Polymer
salt).
Amine FGEW = [(130.23)(100)]/[(8.38)(2)] = 777 by
charge.
Amine FGEW = NAVG/4 = 782 by termination.
Formaldehyde FGEW
= [(30.03)(100)]/(3.06)(1)] = 981 by charge.
Formaldehyde FGEW = NAVG/2
= 1565 by termination.
Combined FGEW = 1/[(1/777) + (1/981)] = 434 by
charge.
Combined FGEW = 1/[(1/782) + (1/1565)] = 521 by
termination.

The structure as drawn on page 1 of this report has a molecular weight of 1162 g/mole.

Uses

Consumer Use? No

Use: Corrosion protection additive in resin for cathodic electrodeposition dip coating for metal substrates.
Amine FGEW = 777 by charge, 782 by termination.
Formaldehyde FGEW = 981 by charge, 1565 by termination.
Combined FGEW = 434 by charge, 521 by termination.
Analogue [redacted]

Other Uses: Analogue [redacted]
Analogs [redacted]

Reaction Description

[redacted]
4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane;
[redacted]

Pollution Prevention Analysis(P2 Analysis:)

None.

Analogs

[redacted]

Comments/Telephone Log

Artifact	Update/Upload Time
[redacted]	[redacted]